



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,207	04/02/2004	Kenneth S. Goekjian	A2004003	2438

26643 7590 04/05/2006

PETER J. GORDON, PATENT COUNSEL
AVID TECHNOLOGY, INC.
ONE PARK WEST
TEWKSBURY, MA 01876

EXAMINER

UNELUS, ERNEST

ART UNIT PAPER NUMBER

2828

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/817,207	GOEKJIAN ET AL.	
	Examiner	Art Unit	
	Ernest Unelus	2828	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Kabenjian (US pat. 5,613,162).

With respect to claim 1, Kabenjian discloses a memory (fig. 1, element 120); a plurality of ports (col. 8, lines 45-46), wherein each port has an associated buffer for temporarily storing data transferred through the port, and wherein each port has an associated direct memory access channel (col. 8, lines 45-52); a direct memory access controller (fig. 2, controller 202) that receives requests for accessing the memory by the plurality of ports, wherein each request is received from one of the plurality of ports (col. 8, lines 52-55), and wherein the direct memory access controller stores parameters defining the direct memory access operations for each port (col. 8, line 66 to col. 9, line 3), and wherein after a request is received from a port the direct memory access controller loads the parameters for the current direct memory access operation for the port to enable the port to access the memory (col. 10, lines 5-10).

With respect to claim 2, Kabenjian discloses a central parameter store for storing parameters for each of a plurality of DMA channels corresponding to each of the

plurality of ports (col. 8, lines 3-20).

With respect to claim 3, Kabenjian discloses wherein the direct memory access controller further comprises means for servicing the request, comprising: means for queuing a memory operation; means for updating parameters; and means for fetching and storing parameters in the central parameter store (col. 8, lines 3-20).

With respect to claim 4, Kabenjian discloses a single DMA controller (202); in the first device, means for writing data to the memory using the DMA controller (see fig. 7, element 602, col. 9, lines 4-49); in the second device, means for reading data from the memory using the DMA controller (fig. 7, element 604, col. 9, lines 4-49); wherein the DMA controller receives information from a DMA context memory specifying parameters for writing data from the first device to the memory and wherein the DMA controller receives information from the DMA context memory specifying parameters for reading data from the memory to the second device (col. 8, lines 25-35 and col. 16, lines 35-45).

With respect to claim 5, Kabenjian discloses a buffer control unit (see fig. 7, element 606), which is connected to the DMA controller for communicating to the DMA controller an indication of an amount of data written into the memory by the first device through the DMA controller and for communicating to the DMA controller an indication of the amount of data read from the memory by the second device through the DMA controller (see col. 16, lines 6-34); and wherein the DMA controller reads data from the

Art Unit: 2828

memory for the second device if data is available as determined by the indicated amount of data written to the memory and the amount of data read from the memory as communicated by the buffer control unit (see col. 16, lines 6-34).

With respect to claim 6, Kabenjian discloses a buffer control unit (606) (see fig. 7), which is connected to the DMA controller for communicating to the DMA controller an indication of an amount of data written into the memory by the first device through the DMA controller and for communicating to the DMA controller an indication of the amount of data read from the memory by the second device through the DMA controller (see col. 16, lines 6-34); and wherein the DMA controller writes data to the memory for the first device if memory space is available as determined by the indicated amount of data written to the memory and the amount of data read from the memory as communicated by the buffer control unit (see col. 16, lines 6-34).

Contact info.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernest Unelus whose telephone number is 571-272-8596. The examiner can normally be reached on 9am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on 571-272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

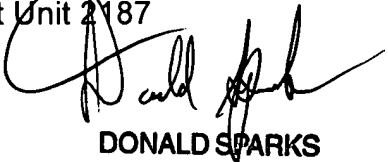
Art Unit: 2828

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

E.U

A handwritten signature in black ink, appearing to be 'E.U.', with a long horizontal stroke extending to the right.

Donald Sparks
Supervisor
Art Unit 2187

A handwritten signature in black ink, appearing to be 'Donald Sparks', with a long horizontal stroke extending to the right.

DONALD SPARKS
SUPERVISORY PATENT EXAMINER